

Remarks:

Claims 25-43, 83, 85, and 88-140 are currently pending in the application. Claims 25-43, 85, 88, 89, 91, and 92 are withdrawn from consideration. Claims 101-109 are objected to, but indicated allowable if rewritten in independent form. Claims 83, 90, 93-100, 110-113, and 117-140 are rejected.

By this amendment, claims 90, 96, 114, 115, 116, and 117 are amended to more distinctly claim the invention.

Applicants believe the amendments made herein add no new matter. Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based on prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to be attached thereto.

Reconsideration and reexamination of the application is respectfully requested in view of the amendments and the following remarks.

Rejections Under 35 U.S.C. §112

Claims 117-140 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The rejection is respectfully traversed.

The Examiner's stated basis for the rejection is that "the claim(s) contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 117, lines 8 and 9, the limitation 'assembling the trimmed one of the at least one of the lid and closure tab to the other of the lid and closure tab' is not described in the specification." (Office Action, p. 2). Applicants respectfully disagree with the Examiner's position and submit that the specification more than satisfies the written description requirement.

Applicants direct the Examiner's attention to paragraph 75 of the *Specification* where it states that, "While the connecting of the tab closure 32 to the lid 30 is described as pressing a portion of the tab closure 32 into a portion of the lid 30, the lid 30 could just as easily be pressed onto the tab closure 32. As a matter of convenience and simplicity, the connection of the tab closure 32 to the lid 30 is described herein as the tab closure 32 being pressed into the lid 30,

with it being understood the description just as easily applies to the pressing of the lid 30 onto the tab closure 32." The press fitting of the closure tab onto the lid is one manner of assembly the closure tab to the lid. As paragraph 75 makes clear that the press fitting may be done in the opposite or reverse manner of pressing the lid onto the closure tab, paragraph 75 provides clear support for assembling the closure tab to the lid or the lid to the closure tab. Applicants respectfully submit that paragraph 75 expressly discloses the reversibility of the assembly of the closure tab and lid, which is more than sufficient to convey to one skilled in the relevant art the assembling of the trimmed one of the at least one of the lid and closure tab to the other of the lid and closure tab. Withdrawal of the rejection is requested.

Rejections Under 35 U.S.C. §102(b)

Claims 93, 94, and 114-166 stand rejected under 35 U.S.C. 102(b) as being anticipated by Hahn (U.S. Patent No. 4,496,408). The rejection is respectfully traversed.

Hahn discloses an apparatus for producing biaxially oriented hollow articles, examples of which include two-liter pop bottles. Two halves of a bottle are thermoformed in a sheet 12, as illustrated in Figs. 1 and 6. **Both** halves are separated from the sheet 12 by trimming station 30. The two halves can then be passed to a spin-welding station 32 where they are axially aligned and rotated relative to each other at a speed sufficient to generate enough heat to fuse the two halves together.

The claimed invention is not anticipated under §102 unless each and every element of the claimed invention is found in the prior art. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 USPQ 81, 90 (Fed. Cir. 1986). To anticipate, a single reference must teach each and every limitation of the claimed invention. *Eolas Technologies Inc. v. Microsoft Corp.*, 399 F.3d 1325, 1335; 73 U.S.P.Q.2D (BNA) 1782 (Fed. Cir. 2005). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The rejection fails to satisfy these standards.

Claim 93, in pertinent part, calls for an automated manufacturing line for making a composite article from first and second thermoforming workpieces by automatically assembling the first thermoformed workpiece to the second thermoformed workpiece comprising an

assembly station for assembling the first and second thermoformed workpieces by *press-fitting* the first and second thermoformed workpieces.

In applying Hahn to our claims, the Examiner asserts that Hahn teaches individually trimming at least the first thermoformed workpiece from the sheet and then press-fitting the first and second thermoformed workpieces and cites col. 6, line 67 through col. 7, line 16 of Hahn for supporting this position. The word press or press-fitting is not present in the Hahn patent. The text cited by the Examiner is related to a spin-welding technique, which is not a press-fit technique. As Hahn does not teach each and every limitation of claim 93, the rejection must fail. Thus, claim 93 is not anticipated by Hahn.

Claim 94 depends directly from claim 93 and is therefore not anticipated by Hahn at least for the same reasons as claim 93. Applicants respectfully request withdrawal of the rejection.

In addition, claim 94 specifies that the press-fitting of claim 93 is a snap-fit. Hahn does not disclose press-fitting, much less a snap-fit. As Hahn does not teach a snap-fit technique, claim 94 is independently patentable over Hahn.

Claim 114 as amended, in pertinent part, calls for an automated manufacturing line for making a composite article comprising a trim station for individually trimming the first thermoformed workpiece from the plastic sheet to form a trimmed first thermoformed workpiece, and an assembly station that assembles the first thermoformed workpiece to the second thermoformed workpiece to form the composite article while the second thermoformed workpiece remains untrimmed in the plastic sheet.

The Examiner simply recites the language of claim 114 and cites Figs. 1, 6, 8, and 9 of Hahn without providing any explanation as to how Figs. 1, 6, 8, and 9 disclose each element of claim 114. A review of Hahn, including the cited drawings, makes clear that at no point does Hahn teach individually trimming the first thermoformed workpiece from the plastic sheet and assembling the first thermoformed workpiece to the second thermoformed workpiece to form the composite article while the second thermoformed workpiece remains untrimmed in the plastic sheet as required by trim station and assembly station of claim 114. In fact, Hahn teaches against this concept, as Hahn discloses separating *both* halves of the bottle from the sheet 12 and

the trimming station 30. As Hahn does not teach each and every limitation of claim 114, the rejection must fail. Thus, claim 114 is not anticipated by Hahn.

Independent claims 115-117 contain the same limitation as claim 114 requiring trimming the first thermoformed workpiece from the plastic sheet while not trimming the second thermoformed workpiece to form a trimmed first thermoformed workpiece. Therefore, claims 115-117 are not anticipated by Hahn for the same reasons as claim 114.

Claims 118-140 depend, directly or indirectly, from claims 114-117, and are therefore not anticipated by Hahn at least for the same reasons as claims 114-117. Applicants respectfully request withdrawal of the rejection.

Claim 118 specifies that the assembly line of claim 117 assembles the lid and closure tab by press-fitting. Hahn does not disclose press-fitting. As Hahn does not teach press-fitting, claim 118 is independently patentable over Hahn.

Claim 119 specifies that the press-fitting of claim 118 is a snap-fit. Hahn does not disclose press-fitting, much less a snap-fit. As Hahn does not teach a snap-fit technique, claim 119 is independently patentable over Hahn.

Claim 120 specifies that the assembly line of claim 117 assembles the lid and closure tab by an adhesive coupling. Hahn does not disclose an adhesive coupling. As Hahn does not teach an adhesive coupling, claim 120 is independently patentable over Hahn.

Claims 123 specifies that the assembly line of claim 117 assembles the lid and closure tab by press-fitting. Hahn does not disclose press-fitting. As Hahn does not teach press-fitting, claim 118 is independently patentable over Hahn.

Rejections Under 35 U.S.C. §103(a)

Claims 83 and 90 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn in view of Padovani (U.S. Patent No. 5,453,237). The rejection is respectfully traversed.

Padovani teaches a method for the thermoforming of hollow objects from a sheet of thermoplastics material by using a single male mould and a movable double female mould. The female mould can be alternately moved side to side and each half of the female mould alternately pressed into the male mould to form objects. Each half of the female mould alternately moved

away from the male mould is moved towards a discharge area, and the objects on that half of the female mould are picked up and transferred to a plurality of receiving formers for processing/handling.

Claim 90 as amended, in pertinent part, calls for an automated manufacturing line for making a composite article comprising a thermoforming station for thermoforming first and second thermoformed workpieces in a plastic sheet comprising alternating one of rows and columns of the first thermoformed workpieces and the second thermoformed workpieces, a trim station for trimming the first thermoformed workpiece from the plastic sheet to form a trimmed first thermoformed workpiece; and an assembly station for assembling the trimmed first thermoformed workpiece onto the second thermoformed workpiece to form the composite article while the second thermoformed workpiece remains untrimmed in the plastic sheet.

The Examiner states that Hahn teaches all of the limitations of claim 90 save the plastic sheet comprising alternating ones of rows and columns of the first thermoformed workpiece and the second thermoformed workpieces. The Examiner asserts that Padovani teaches the sheet comprising alternating ones of rows and columns, citing Figs. 16-19, which leads to the erroneous conclusion that the combination teaches all of the elements of the claim. The combination does not teach all elements of the claim as asserted because while Padovani teaches a sheet comprising alternating ones of rows and columns, at no point does Padovani teach the claimed trim station and assembly station, and such stations are not illustrated in any of Figs. 16-19.

As discussed above, the trim station and assembly station of claim 90 are not taught by Hahn. Hahn does not teach or suggest trimming the first thermoformed workpiece from the plastic sheet and assembling it to the second thermoformed workpiece while the second thermoformed workpiece remains untrimmed in the plastic sheet. Padovani does not teach the claimed trim station and assembly station are therefore fails to remedy the shortcomings of Hahn. Therefore, the combination of Hahn and Padovani would not teach the claimed trim station and assembly station which function to trim the first thermoformed workpiece from the plastic sheet and assemble it to the second thermoformed workpiece while the second

thermoformed workpiece remains untrimmed in the plastic sheet. The combination would teach a trim station and assembly station that trim **both** of the workpieces and assembling them by spin welding, which is antithetical to the claimed assembly line. A person of ordinary skill in the art would not conclude that the invention of claim 90 would have been an obvious variation of Hahn in view of Padovani. As the combination of Hahn and Padovani does not reach the claimed invention, claim 90 is non-obvious and therefore patentable over Hahn in view of Padovani.

As claim 83 depends directly from claim 90, claim 83 is non-obvious and patentable over Hahn in view of Padovani for the same reasons as claim 90.

Claims 96-100 and 110-113 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Hahn in view of Padovani. The rejection is respectfully traversed.

Claim 96 as amended, in pertinent part, calls for an automated manufacturing line for making a composite article comprising a trim station for individually trimming the first thermoformed workpiece from the plastic sheet to form a trimmed first thermoformed workpiece, an assembly station for assembling the trimmed first thermoformed workpiece onto the second thermoformed workpiece to form the composite article while the second thermoformed workpiece remains untrimmed in the plastic sheet, with a carrier moveable between a first position, where it picks the trimmed first thermoformed workpiece, and a second position, where it assembles the trimmed first thermoformed workpiece to the second thermoformed workpiece.

The Examiner states that Hahn teaches all of the limitations of claim 96 but “fails to teach an assembly station comprising a carrier moveable between a first position where it picks the trimmed first thermoformed workpiece, and a second position.” (*Office Action*, p.6) As discussed above, the trim station of claim 96 is not shown by Hahn, nor would be obvious in view of the teachings of Hahn. Padovani does nothing to remedy the shortcomings of Hahn, as Padovani does not show trimming the first thermoformed workpiece from the plastic sheet while not trimming the second thermoformed workpiece to form a trimmed first thermoformed workpiece. Thus, the combination of Hahn and Padovani will not reach claim 96, which expressly calls for a trim station for individually trimming the first thermoformed workpiece

from the plastic sheet to form a trimmed first thermoformed workpiece, and an assembly station for assembling the trimmed first thermoformed workpiece onto the second thermoformed workpiece to form the composite article while the second thermoformed workpiece remains untrimmed in the plastic sheet. The combination would teach the a trim station and assembly station that trim **both** of the workpieces and assembling them by spin welding, which is antithetical to the claimed assembly line. A person of ordinary skill in the art would not conclude that the invention of claim 96 would have been an obvious in view of the combination. As the combination of Hahn and Padovani does not teach the claimed invention, claim 96 is non-obvious and therefore patentable over Hahn in view of Padovani.

Claims 97-100 and 110-113 depend, directly or indirectly, from claim 96 and are non-obvious and patentable for the same reasons as claim 96.

Allowable Subject Matter

Applicants acknowledge with thanks the Examiner's determination that claims 101-109 are allowed if rewritten into independent form. Claims 101-109 depend indirectly from claim 96. As discussed previously, the subject matter of claim 96 is not disclosed in the prior art of record, and is, therefore, patentable. Applicants request the allowance of claims 101-109, as claims 101-109 depend from patentable subject matter.

Conclusion

The Examiner has not rejected claim 95. As the Examiner previously indicated the allowability of claim 95, Applicants believe claim 95 is patentable and requests the allowance of claim 95.

No new matter has been added by the foregoing amendments, full support therefore being shown in the drawings and specification as filed. All claims remaining in the application are believed to now be in condition for allowance. Early notification of allowability is respectfully requested.

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If there are any questions regarding this matter, please contact the undersigned attorney.

Respectfully submitted,

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